

INTERNATIONAL SEARCH REPORT

International Application No  
GB 03/03786

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 E21B21/10 E21B34/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02 061236 A (TELFER GEORGE ;HOWLETT PAUL DAVID (GB); SPS AFOS GROUP LTD (GB)) 8 August 2002 (2002-08-08) Claim 2 lacks an inventive step over this document considered alone abstract; claims 13-16; figure 5	1,2
A	US 5 499 687 A (LEE PAUL B) 19 March 1996 (1996-03-19) cited in the application claims 1,2; figures 3,4	1
A	WO 01 90529 A (LEE PAUL BERNARD) 29 November 2001 (2001-11-29) see balls 18/19 and seats 17/25 respectively	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

22 January 2004

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29/01/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 253 861 B1 (CARMICHAEL MARK ET AL) 3 July 2001 (2001-07-03) abstract; figure 4 -----	1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

US/GB 03/03786

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02061236	A	08-08-2002	WO 02061236 A1 GB 2389608 A	08-08-2002 17-12-2003
US 5499687	A	19-03-1996	US 4889199 A	26-12-1989
WO 0190529	A	29-11-2001	AU 5239901 A WO 0190529 A1	03-12-2001 29-11-2001
US 6253861	B1	03-07-2001	GB 2341405 A , B	15-03-2000